



Pacific Territories Regional Project for the Sustainable Management of Ecosystems (PROTEGE)

Climate change poses an unprecedented threat to food resources, particularly on small Pacific islands that have no alternative land. These islands face risks such as sea level rise, soil salinisation and more intense weather events. At the same time, the larger islands are experiencing deforestation, which further exacerbates these challenges, especially soil erosion.

General presentation of the project



General objective¹

To promote sustainable economic development that is resilient to climate change within overseas countries and territories (OCTs) through regional cooperation. This regional cooperation project aims to support the public policies of the OCTs.



Specific objectives

- To strengthen sustainability, climate adaptation, and autonomy of the main value chains in the primary sector (Themes 1 and 2).
- To strengthen the security of ecosystem services by preserving water resources and biodiversity (Themes 3 and 4).



R3. Water

- Water and aquatic ecosystems will be preserved, managed and/or restored.
- Resilience to water-related risks will be strengthened.

R4. Invasive species

- Biosecurity will be improved.
- Invasive species will be monitored and managed.

Partners

The project is implemented by the Pacific Community and the Pacific Regional Environment Programme. The authorising officer, New Caledonia, is supported by the territorial authorising officers of Wallis and Futuna, French Polynesia and Pitcairn.



Intervention strategy

The project aims to strengthen adaptation and resilience actions in response to the significant effects of climate change by implementing pilot initiatives, risk assessments, identifying corrective measures and encouraging engagement in voluntary initiatives.



Timescale

72 months (2018–2024).



Budget

EUR 36 million (11th European Development Fund) + EUR 128,000 co-financed by the targeted OCTs.



Expected results

The project is structured around four themes, summarised as follows:

R1. Agriculture and forestry

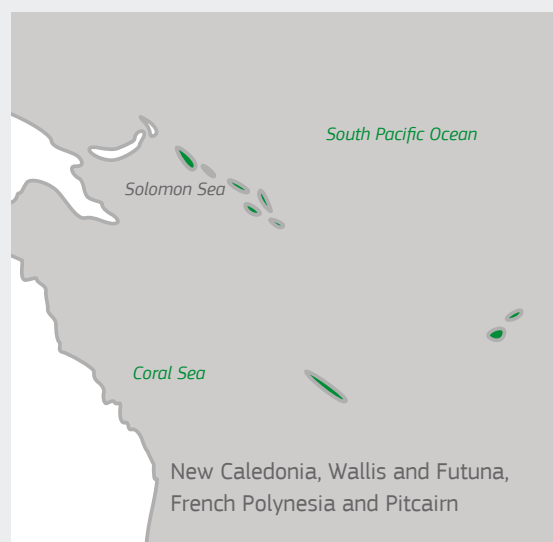
- Consolidated agroecological production systems will be transferred.
- A policy for the management of forests, agroforestry systems, and coconut groves will be defined and rolled out.
- Products from the forest, agroecology and coconut groves will be promoted.
- Coordination and support tools, common to the four themes, will be deployed.

R2. Coastal fisheries and aquaculture

- Integrated aquaculture activities will be tested.
- The participation and integrated planning of fisheries resources will be reinforced.
- Fisheries and aquaculture will be promoted as part of a sustainable development pathway.

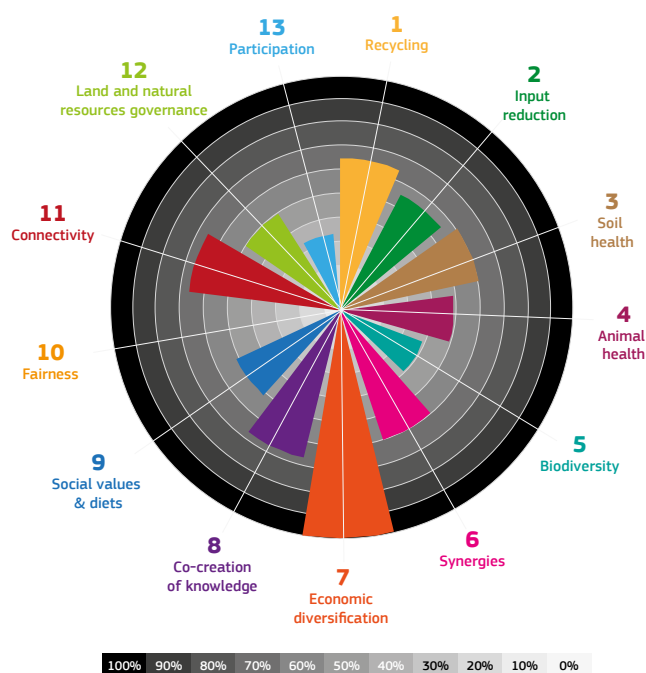


Intervention area



¹ <https://protege.spc.int/fr>

Agroecological classification of the project according to the 13 principles of the HLPE



1 Recycling

The supported initiatives include the promotion of green fertilisers through the dissemination of seeds and associated practices, support for the collective management of green waste at communal level and the valorisation of organic waste, such as animal effluents, green waste, and waste related to fishing and aquaculture activities. These initiatives reduce greenhouse gas emissions linked to the transport and manufacturing of chemical fertilizers, while increasing the carbon stock in the soil. For example, as part of the project, fish hydrolysate, obtained from the recycling of fish waste, was used in pig feed in New Caledonia. In addition, a study was carried out on waste management from the aquaculture industry (excluding pearl farming), highlighting the potential for developing a system for recycling organic waste from shrimp farming units in ponds in French Polynesia. Finally, an inventory of aquaculture waste identified the potential for recycling plastic waste from aquaculture activities.

2 Input reduction

To reduce water consumption, the project promotes the adoption of water-efficient crops and practices that enhance water retention in the soil, building on existing local best practices. It encourages the addition of organic matter, such as compost, organic fertilisers and potting soil, and supports the development of seedling substrate from coconut by-products to stimulate soil biological activity. It promotes organic pest and disease management practices, such as biological control (e.g. the use of habitat plants or trap crops) and mechanical control (e.g. mulching with wood shavings), to reduce reliance on synthetic pesticides and herbicides. Training is also offered

for the self-construction of weeding equipment, based on local alternative solutions. The project reduces waste generation by recovering waste from aquaculture activities and ensures the leveraging and dissemination of these good practices. However, it does not aim to reduce energy consumption.

3 Soil health

The project aims to improve soil health by promoting natural ecological processes that regulate soil functions. Several actions have been implemented, such as the promotion of cover crops on demonstration plots, the provision of seeds and cuttings, the organisation of training sessions on reduced tillage and soil regeneration techniques, as well as the pooling of knowledge and tools for sustainable fertility management. Farmers benefit from improved access to local organic matter, particularly in organic farming in New Caledonia, thanks to a diagnosis of available organic products and the implementation of composting and manure application plans. Finally, combined mulching tests were carried out at the demonstration sites.

4 Animal health

The project supports the development of Oceanian livestock farming models that are compatible with organic farming certification and based on agroecological principles. It favours resilient, locally adapted and naturally healthy breeds. Research is being carried out to identify indicators (environmental, health, animal welfare) that can be used



to monitor these models. In addition, the project supports the production of local and organic feed for the poultry and pig farming sectors. It provides feed formulation tools and supports the structuring of these sectors. Pig farming is also being supported to transition to free-range systems. Demonstration farms are experimenting with rotational pig pens, following a protocol co-defined with farmers to assess the agronomic benefits (fertility management), environmental and health impact depending on the stocking density, rotation schedules, sanitary fallow periods, and the type of follow-up crops (staples or vegetables). Mobile poultry houses are also being encouraged. Regarding cattle farming, genetic adaptation to the environment is analysed, and training in feed management and animal welfare is offered to farmers.

5 Biodiversity

The project does not appear to aim at diversifying natural resources, preserving forest fragments or promoting crop rotation systems. However, it does contribute to enhancing biodiversity in agricultural landscapes through the reintroduction of trees into farming systems and the diversification of organic food crop varieties – such as Pacific bananas and market garden crops from New Caledonian networks. This approach is underpinned by an analysis of existing and potential local supply chains for plant material (seedlings, seeds, trees), with the aim of improving availability. In addition, efforts are underway to restock the lagoons with locally adapted species of fish and invertebrates, in order to maintain or even restore fish stocks. The project also encourages natural pollination by promoting melliferous plants and distributing their seeds.

6 Synergies

The project aims to optimise ecosystem services at both farm and landscape level by combining biological elements. To this end, it supports a range of initiatives such as the development of agroforestry, the identification of seedlings and the monitoring of plots, and the promotion of integrated crop–livestock systems that include sanitary fallow rotations between grazing areas and cropping areas. It also contributes to watershed restoration through reforestation, riverbank revegetation, and awareness-raising on local watershed dynamics. Support for

agroforestry includes awareness campaigns and practical training for producers, the development of a repository of locally adapted plants, the creation of a dedicated nursery, the establishment of agroforestry plots on coral soil. Moreover, producers participate in the development of agroforestry management plans that include detailed descriptions of species, quantities, and schedules. Rotational grazing systems and invasive plant management practices have also been improved to enhance soil quality and forage yields. All these initiatives improve ecosystem services and strengthen the resilience of agroecosystems to extreme weather events and climate change. Furthermore, the project supports low-cost, small-scale fish farming, making it better suited to local conditions and climate variability, thereby increasing the adaptive capacity of local populations.

7 Economic diversification

The project actively encourages producers to diversify their sources of income by adding value to coconut-based products, non-timber forest products, local timber, beekeeping products, and more. In addition, it has increased the availability of reproducible organic seeds. Technical and economic studies have been conducted to develop value chains for non-edible marine products, both for local and export markets, in order to reduce waste and increase economic benefits for farmers.

8 Co-creation of knowledge

The project facilitates exchanges, analyses existing good practices and strengthens the skills of producers. For each of the project's four focus areas, a participatory and multi-stakeholder approach was adopted, fostering interaction between producers and local actors, enabling the sharing and capitalisation of knowledge and experiences. The project also carried out several assessments of practices, species inventories and an analysis of both innovative and locally established management approaches, that are locally recognised as good practices. In addition, training sessions have been organised to strengthen knowledge across a range of agroecology-related topics. Moreover, demonstration farms have been set up to enable the co-construction of innovations and knowledge sharing between producers.



9 Social values & diets

The project identifies the cultural and social practices associated with community diets. However, it does not include capacity-building measures to enable people to make informed decisions about the food they consume.

10 Fairness

The project does not explicitly aim to improve equity, working conditions, or social well-being. Nor does it seek to promote empowerment—except in the context of the COVID-19 pandemic, where a specific objective was defined—to address inequality and poverty, or to uphold human rights. However, some project interventions contribute indirectly to these goals, such as job creation initiatives benefiting young people in rural areas.

11 Connectivity

At the regional level, the project supports initiatives aimed at promoting sustainable and resilient Oceanian food systems that generate added value. It has also contributed to the launch of a multi-stakeholder regional dialogue on coastal fisheries and aquaculture. The diagnostics carried out also supported the development of inclusive policies aimed at strengthening the sustainability of food systems and integrating local marine products into collective catering services.

12 Land and natural resources governance

The project has supported agricultural management policies in favour of biodiversity, particularly by contributing to the development of strategic frameworks for coastal fisheries and aquaculture to guide their development in a coordinated manner. In addition, it has been involved in monitoring fishing pressure on reef-lagoon resources and in the establishment of coastal fisheries observatories to facilitate the sound management of marine resources. The project also supports the improvement of aquaculture practices through international, regional and local environmental certification schemes.

13 Participation

The project pays relatively limited attention to the principle of participation. However, it has developed a regional multi-stakeholder approach that supports the public policies of the four OCTs. It has also supported a system for the integrated management of fisheries resources and the enhancement of knowledge about these resources. Regional platforms have also been established in the areas of agroecology and forestry, fisheries and aquaculture, and water.



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SUCCESS FACTORS/CHALLENGES

- + The project effectively facilitates consultation and the sharing of experience between a variety of stakeholders from different territories and on a wide range of topics.
- + The project integrates agroecology in coastal areas, which represents innovative feedback likely to enrich the documentation on agroecology in these production areas.
- + The project targets the different primary production sectors in these areas and adapts the support offered to their respective specificities.
- The great thematic diversity and the significant number of planned interventions under each theme slow down the project implementation, weakening its visibility and its overall coherence.
- The project appears to place little emphasis on integrating a cross-cutting approach related to gender, the empowerment of vulnerable groups, and the promotion of food sovereignty.